



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/561,719 | 12/22/2005 | Jae-Wan Ahn | 11746-6 | 1127 |
| 7590 Klaus P Stoffel Wolff & Samson One Boland Drive West Orange, NJ 07052 | | | EXAMINER PATEL, YOGESH P | |
| | | | ART UNIT 3732 | PAPER NUMBER |
| | | | MAIL DATE 03/31/2008 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,719

Applicant(s)

AHN, JAE-WAN

Examiner

YOGESH PATEL

Art Unit

3732

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-17 and 20 is/are rejected.
- 7) ☒ Claim(s) 8, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On page 7, line 27, the word "te" should be corrected with the word "the".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 17-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is intended by "...wax is provided at least one of at the tube member, at one side of the exit hole, and at the bottom portion of the tank".

In claim 17, it is not clear what is intended by "a control unit to be controlled by the operating button is provided at the inner face of the main body." Is the operating button or the control unit is provided at the inner surface of the main body? Isn't the control unit 'C' is an external unit?

Claim 17 recites the limitation "the control" in (d). There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 19, the phrase "i.e." renders the claim indefinite because it is unclear what are the meets and bounds of the claim and the scope of the claim is not clear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 7, 10-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by DeStefanis (Pat. 5, 346, 394).

DeStefanis discloses a molten wax applicator including a main body 10 having a shape of hollow cylinder (col. 2 lines 45-46) and including a tank 22 (e.g. reservoir) provided inside of the main body, the tank being capable of containing a wax, the main body being electrically connected by an electric wire 38; a chisel tip 12 having a hole 56, the chisel top being installed at one end of the main body; and a heating member 16 being heated by a power supply; wherein the main body includes a plurality of chambers (each end of the main body in an assembled form), which are detachably attached (e.g. by threaded member) to each other (fig. 4), a chisel tip connection portion formed in at least one chamber (fig. 2), and a tube member (the threaded portion of the tip) forming a tube passageway and connecting the tank and the chisel tip connection portion (fig. 2).

DeStefanis further discloses a first chamber having a tube member (e.g. the threaded portion engages with the end portion of the main body), an exit hole 56 being formed at one end of the tube member and an inlet hole being formed at the other end of the tube member 54, the exit hole being connected with the tip connection portion; and a second

Art Unit: 3732

chamber having a discharging hole to be connected with the inlet hole of the first chamber, a tank to contain a wax being provided inside thereof and a heating member 16 is disposed at the side of the exit hole of the first chamber.

DeStefanis further discloses a valve is provided in the tube passageway between the exit hole and the inlet hole in order to selectively open or close the tube passageway by means of the operation of the operating button (col. 4, lines 39-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis as applied to claim 1 and 10 above, and further in view of Canfield et al. (Pat. 6186959).

DeStefanis discloses all elements of the claimed invention except for a filter disposed at the exit hole or the inlet hole.

Canfield teaches a filter 134 (fig. 6) disposed at the exit hole of a chamber. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have provided a filter of Canfield to the invention of DeStefanis in order to prevent foreign substances from entering a passage.

5. Claims 6 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis as applied to claims 1 and 10 above, and further in view of McLisky (20060060615).

DeStefanis discloses all elements of the claimed invention except for solenoid valve electrically connected with the operating button.

McLisky teaches solenoid valve 4 electrically connected with the operating button 8 (figs. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify DeStefanis by providing solenoid valve electrically connected with the operating button as taught by McLisky in order to control the flow of wax in a efficient manner by a dentist/user.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis in view of Schoelz (3522654).

DeStefanis discloses all elements of the claimed invention except for a temperature sensing device.

Schoelz teaches temperature sensing device (rheostat) 74 which sense the temperature as set and maintains the temperature. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify DeStefanis by providing temperature sensing device as taught by Schoelz in order to maintain desired temperature for melting wax.

7. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis in view of McLisky (Pub. 2006/0060615)

DeStefanis discloses all elements of the claimed invention except for an operating button being provided at the outer face of the main body, a control unit to be controlled by the operating button and the solenoid valve is controlled by the control of the control unit according to the operation of the operating button.

McLisky teaches an operating button 8 is provided at the outer face of the main body, a control unit 9 to be controlled by the operating button is provided at the inner face of the main body and the solenoid valve 4 is controlled by the control of the control unit according to the operation of the operating button. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify DeStefanis by having operating button on the main body, solenoid valve to control the fluids (e.g. wax) and the control unit as taught by McLisky in order to efficiently dispensing fluid (e.g. wax) from the tank.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis/McLisky as applied to claim 17 above, and further in view of Johnson (Pat 1945813).

DeStefanis/McLisky discloses all elements of the claimed invention except for an air control valve with a cap.

Johnson teaches air control valve with a cap 19. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify DeStefanis/ McLisky by providing an air control valve with a cap in order to control the air-volume.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeStefanis/McLisky/Johnson as applied to claim 17 above, and further in view of Canfield.

DeStefanis/McLisky/Johnson discloses all elements of the claimed invention except for filter. Canfield teaches filter as in claim 4.

Allowable Subject Matter

10. Claim 8 is objected to as being dependent upon a rejected base claim, but may be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH PATEL whose telephone number is (571)270-3646. The examiner can normally be reached on 8:00 to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YP 03/27/2008

Yogesh Patel
Patent Examiner
AU: 3732

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732